

WE CLAIM

1. Process for producing a metal foam body, whereby a gas-containing fused metal is produced and the fused metal is allowed to coagulate under formation of a metal foam body,
i n w h i c h
the introduced material is melted under atmospheric pressure and thereby and/or subsequently gas is introduced into the fluid metal, whereupon the fluid metal is brought into a mould and allowed to coagulate at least for sometime under reduced surrounding pressure.
2. Process as per claim 1,
i n w h i c h
at least parts of the introduced material are converted into at least one compound before melting, which emits a gas soluble in the fluid metal in the region of and/or over the melting interval of the same.
3. Process as per claim 2,
i n w h i c h
the conversion of parts of the introduced material takes place through contact with the gas or gas mixture.
4. Process as per claim 2,
i n w h i c h
the conversion of parts of the introduced material takes place through contact with aerosol.
5. Process as per one of the claims 2 to 4,
i n w h i c h
the compound emits gas(es) at a temperature of max. 250°C, preferably max. 150°C, above the melting or coagulating temperature of the metal.



6. Process as per one of the claims 1 to 5,
i n w h i c h
the introduced material is formed from a light metal, especially magnesium or a magnesium alloy.
7. Process as per one of the claims 1 to 6,
i n w h i c h
the coagulation of the fluid metal takes place under a surrounding pressure in the range of 0.03 bar to 0.2 bar.
8. Process as per one of the claims 1 to 7,
i n w h i c h
the mould is pre-heated before introducing the fluid metal.
9. Process as per one of the claims 1 to 8,
i n w h i c h
a heat-insulated mould is used.
10. Use of die-cast scrap as introduced material in a process as per one of the claims 1 to 9.